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basic imagery interpretation report

Soviet Mobile Missile Summary

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DEPLOYED STRATEGIC SSM FACILITIES
BE: Various
USSR

Top Secret

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SOVIET MOBILE MISSILE SUMMARY

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SUMMARY

1. (TSR) This report updates information in previous NPIC report [redacted] on SS-20 mobile IRBM bases in the USSR. This report includes a synopsis of significant mobile missile activity seen at two offensive missile test centers, three production facilities, a research/training facility, a missile support rear depot, and several command and control facilities. Also included is a list of target names and BE numbers for the newly designated SS-20 field training areas. 25X1

2. (TSR) Significant activity was observed at deployed facilities (Figure 1) during this reporting period. A new mobile base was identified, the equipment mockups at Postavy were identified as being associated with the SS-16 mobile ICBM missile system, probable SS-16/-20 missile support equipment was seen at a missile support rear depot, ten field training exercises were observed, and an SS-20 transporter-erector-launcher (TEL)/resupply vehicle with a canister was observed in an open single-bay garage.

3. (U) The reporting period extends from [redacted] A location map, 13 annotated photographs, and four tables are included in the report. 25X1

DISCUSSION

4. (TSR) Construction was begun on a new SS-20 base during the reporting period. As of [redacted] 18 of the 27 bases were in the late stage of construction or were complete and were assessed to be capable of maintaining an operational unit. The 27 bases, including the Remote Site at Drovyanaya, will eventually contain a total of 246 single-bay, sliding-roof garages (SRBs) to house SS-20 missiles on launchers. The bases are in the following geographic regions: nine are in the western section of the USSR (Belorussia), eight are in the Ural mountain region, four are in the western section of Siberia, and six are in the eastern section of Siberia. 25X1

5. (S/D) On [redacted] the fourth SS-20 mobile IRBM base in the Yurya complex was identified in an early stage of construction at Yurya SSM Launch Position 7 [redacted] Figure 2). Building foundations for seven confirmed and two probable single-bay garages and for one three-bay garage were under construction. No SS-20 construction was underway on [redacted] The new base, designated Yurya Mobile IRBM Base 4, is the 27th SS-20 mobile missile base identified to date and the second base identified in 1980 (Table 1). Construction of this base had been predicted following the start of construction for the fourth base in the Verkhnyaya Salda complex in March. Construction of new SS-20 bases has consistently been started in the Yurya area following the start of SS-20 construction in the Verkhnyaya Salda complex. 25X1 25X1 25X1

6. (TSR) A reanalysis of canister mockups at the Postavy Mobile IRBM Base (Figure 3) revealed that the mockups correspond in both size and configuration to the SS-16 ICBM missile canister. The two main parts of the canister mockups—the main body and the launch assist device/gas expansion chamber (LAD) section—are nearly identical to the SS-16 canisters previously observed at Plesetsk Missile/Space Test Center (MSTC) SSM. The overall length of each mockup is [redacted]—the main body is [redacted] and the LAD section is [redacted] The overall length of comparable SS-16 canister components is [redacted] meters—the main body is [redacted] and the LAD is [redacted] The length of the main canister body and the length and diameter of the LAD are the principal means of distinguishing between SS-16 and SS-20 canisters. Although the main body of the SS-16 canister is longer overall than the main body of the SS-20 canister [redacted], the most distinctive difference between the two canisters is in the LAD; the SS-16 LAD is shorter and wider in diameter than the SS-20 LAD ([redacted] An SS-20 canister (Figure 4) near the mockups was used for visual and mensural comparison. Canister mockups were also constructed at Polotsk SS-20 Mobile IRBM Base 1. These mockups, although similar in appearance to those at Postavy, correspond in both size and configuration to the SS-20 canister. The overall length of each mockup is [redacted]—the main body is [redacted] and the LAD is [redacted] The overall length of comparable SS-20 canister components is [redacted]—the main body is [redacted] and the LAD is [redacted] The mockups at both Postavy and Polotsk were fabricated from wood and were seen under construction on [redacted] and on [redacted] respectively. 25X1 25X1.1 25X1 25X1 25X1 25X1 25X1 25X1 25X1 25X1 25X1

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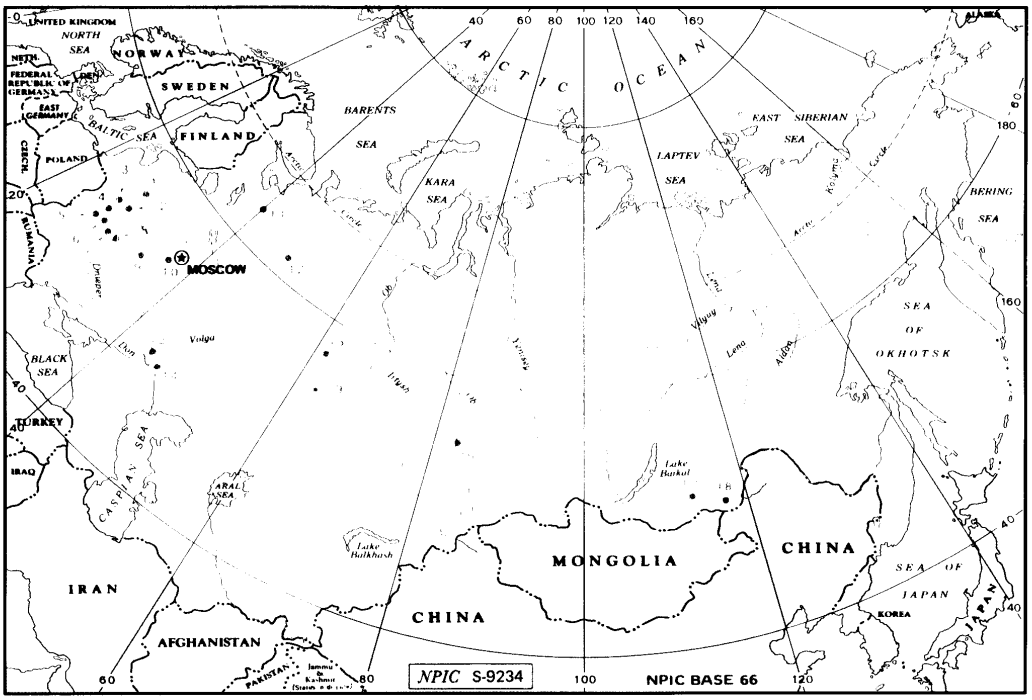

FIGURE 1. LOCATIONS OF SS-16/-20 ACTIVITY, USSR

Item	Installation Name	BE No
1	Polotsk Mobile IRBM Base 1	[redacted] 25X1
	Polotsk Mobile IRBM Base 2	
2	Postavy Mobile IRBM Base	
3	Smorgon Mobile IRBM Base 1	
	Smorgon Mobile IRBM Base 2	
4	Minsk Motor Vehicle and Guided Missile Support Plant	
5	Kozhanovichi Mobile IRBM Base	
6	Konkovichi Mobile IRBM Base	
7	Mozyr Mobile IRBM Base/Training Facility	
8	Rechitsa Mobile IRBM Support Base	
9	Bryansk Guided Missile Support Equipment Plant II	
10	Serpukhov SSM Engineering Research Training Facility	
11	Plesetsk Missile/Space Test Center SSM	
12	Yurya Mobile IRBM Base 1	
	Yurya Mobile IRBM Base 2	
	Yurya Mobile IRBM Base 3	
	Yurya Mobile IRBM Base 4	
13	Volgograd Steel and Machinery Plant Krasnyy Barricada 221	
14	Kapustin Yar Missile/Space Test Center SSM	
15	Verkhnyaya Salda Mobile IRBM Base 1	
	Verkhnyaya Salda Mobile IRBM Base 2	
	Verkhnyaya Salda Mobile IRBM Base 3	
	Verkhnyaya Salda Mobile IRBM Base 4	
16	Novosibirsk Mobile IRBM Base 1	
	Novosibirsk Mobile IRBM Base 2	
	Novosibirsk Mobile IRBM Base 3	
	Novosibirsk Mobile IRBM Base 4	
17	Drovyanaya Mobile IRBM Base 1	
	Drovyanaya Mobile IRBM Base 2	
	Drovyanaya Mobile IRBM Base 3	
	Drovyanaya Mobile IRBM Base 4	
	Drovyanaya Mobile IRBM Base 5	
18	Olovyannaya Mobile IRBM Base 1	
19	Bobrovskiy Missile Support Rear Depot	

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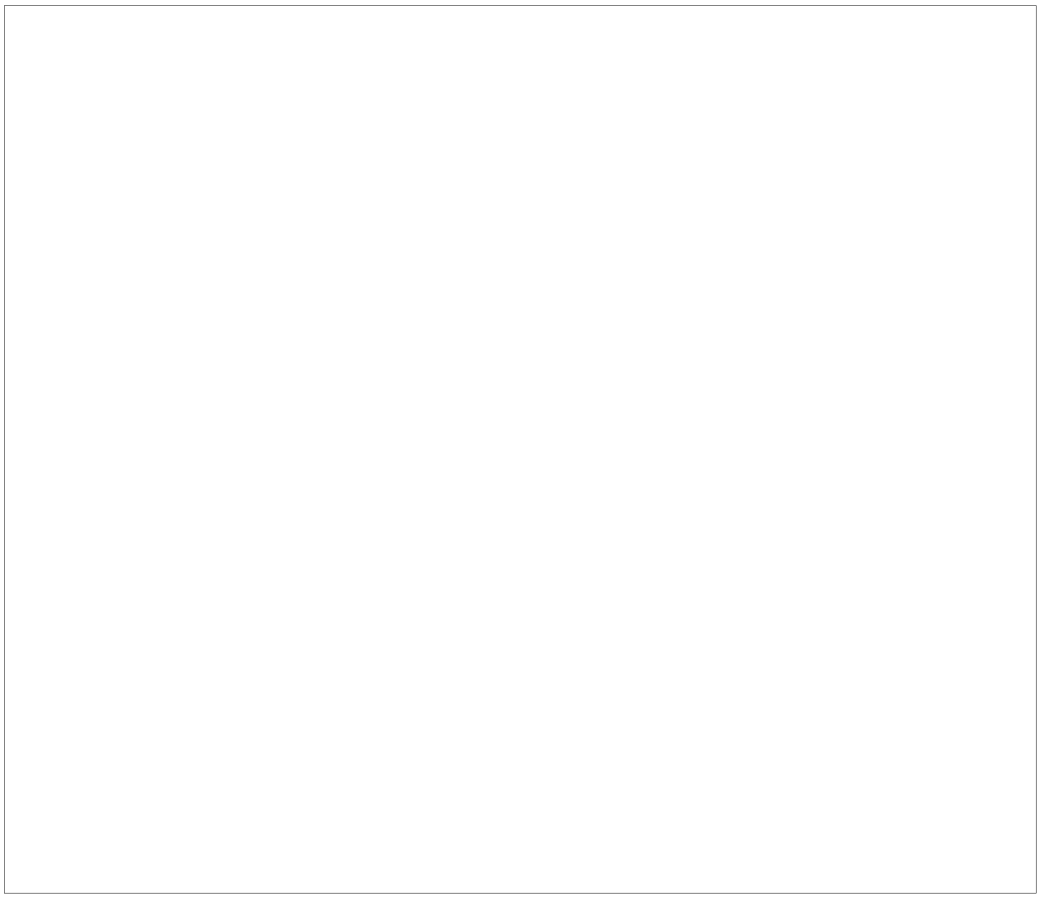
Table 1. Summary of SS-20 Construction at Deployed Areas *This table in its entirety is classified TOP SECRET RUFF*

	SSM / Installation Name	First Identified	Date Assessed as Being Operational	Date Last Imaged	OPERATIONS AREA: Single-Bay Garage Comp	Single-Bay Garage Ucon	3-Bay Garage Comp	3-Bay Garage Ucon	11-Bay Garage Comp	11-Bay Garage Ucon	Construction and/or Modification Comp	GENERAL SUPPORT AREA/NUCLEAR PAYLOAD HANDLING FACILITY: 11-Bay Garage (66 x 18m) Number	11-Bay Garage Construction Comp	Tech Support Bldg Number	Tech Support Bldg Construction Comp	High 2-Bay Bldg Number	High 2-Bay Bldg Construction Comp	Clerestory Bldg Number	Clerestory Bldg Construction Comp	Status of Construction at RTP	Remarks/Comments
EASTERN USSR	Drovyanaya Mobile IRBM Base 1				9	—	3	—	1	—	Yes	1	Yes	0*	—	0*	—	0*	—	[redacted] high 2-bay and technical spt bldg complete; clerestory and 11bay garage started	Personnel shelters ucon near athletic field; mockup sliding-roof and 3-bay garages
	Drovyanaya Mobile IRBM Base 2				9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—		Personnel shelters ucon in spt area; mockup sliding-roof garage; 2 admin/personnel bldgs ucon in spt area
	Drovyanaya Mobile IRBM Base 3				9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—		Personnel shelters ucon in spt area Temporary construction spt area being razed; mockup sliding-roof and 3-bay garages
	Drovyanaya Mobile IRBM Base 4				0	9	0	3	0	—	No	2	No	0*	—	0	—	0	—		Personnel shelters ucon near spt area; 3 unid multibay garages ucon near spt area
	Drovyanaya Mobile IRBM Base 5				9	—	3	—	0	—	No	2	No	0*	—	0	—	0	—		2 SS-11 canisters in spt area; second 11-bay garage ucon on [redacted] 25X1
	Drovyanaya Remote Site 1				3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—		2 open-sided sheds & 2 personnel bldgs
	Olovyanaya Mobile IRBM Base 1				0	9	0	3	0	0	No	0	0	0	—	0	—	0	—		
CENTRAL USSR	Novosibirsk Mobile IRBM Base 1				9	—	3	—	0	—	Yes	2	Yes	0*	—	0*	—	0*	—	Complete	
	Novosibirsk Mobile IRBM Base 2				9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—		
	Novosibirsk Mobile IRBM Base 3				9	—	3	—	0	—	No	2	Yes	0*	—	0	—	0	—		Two 11-bay garages end-to-end in spt area
	Novosibirsk Mobile IRBM Base 4				0	9	0	3	0	—	No	1	No	0*	—	—	—	—	—		
	Verkhnyaya Salda Mobile IRBM Base 1				9	—	3	—	0	—	Yes	2	Yes	0*	—	0*	—	0*	—	Payload handling facility externally complete	2 personnel/admin bldgs ucon in spt area
	Verkhnyaya Salda Mobile IRBM Base 2				9	—	3	—	0	—	Yes	2	Yes	0*	—	0	—	0	—		
	Verkhnyaya Salda Mobile IRBM Base 3				0	8	0	3	—	—	—	1	No	0*	—	—	—	—	—		Prob clearing for ninth SRB observed
	Verkhnyaya Salda Mobile IRBM Base 4				0	9	0	3	0	0	No	0	—	—	—	—	—	—	—		
	Yurya Mobile IRBM Base 1				9	—	3	—	0	—	Yes	1	Yes	0*	—	0*	—	0*	—		
	Yurya Mobile IRBM Base 2				9	—	3	—	0	—	Yes	2	Yes	0	—	0	—	0	—	Clerestory in late stage of construction; remainder of NPHF complete	
	Yurya Mobile IRBM Base 3				0	6	0	2	0	0	No	1	No	—	—	—	—	—	—		Prob clearing for third 3-bay garage
	Yurya Mobile IRBM Base 4				0	7	0	1	0	0	No	0	0	—	—	—	—	—	—		1 bks-type bldg complete; foundation for security bldg observed
WESTERN USSR	Konkovichi Mobile IRBM Base				9	—	3	—	1	—	Yes	2	Yes	1	Yes	1	Yes	1	Yes	Complete	
	Kuzhanovichi Mobile IRBM Base				9	—	3	—	1	—	Yes	2	Yes	1	Yes	1	Yes	1	Yes	Complete	Temporary construction spt area being razed
	Mozyr Mobile IRBM Base Training Facility				9	—	3	—	0	—	Yes	3	Yes	1	Yes	1	Yes	1	Yes	Complete	
	Pinsavy Mobile IRBM Base				9	—	3	—	0	—	Yes	2	Yes	1	Yes	1	Yes	1	—	Complete	Temporary construction spt area being razed
	Smorgon Mobile IRBM Base 1				9	—	3	—	0	—	Yes	2	Yes	1	Yes	1	Yes	0	—	Complete	SS-5 GSE bldg prob being used in place of clerestory bldg
	Smorgon Mobile IRBM Base 2				0	—	0	1	—	—	No	1	No	0	—	0	—	0	—		
	Rechitsa Mobile IRBM Base				—	—	—	—	—	—	—	2	Yes	1	Yes	1	Yes	1	No	Complete	
	Rechitsa Remote Site 1				3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—		
	Rechitsa Remote Site 2				3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—		
	Rechitsa Remote Site 3				3	—	—	—	—	—	Yes	—	—	—	—	—	—	—	—		
	Polotsk Mobile IRBM Base 1				9	—	3	—	0	—	Yes	2	Yes	1	No	1	No	1	No	Complete	[redacted] & POL stor & fueling facility in midstage of construction 25X1
	Polotsk Mobile IRBM Base 2				0	6	0	2	0	—	No	0	—	0	—	0	—	0	—		Temporary construction spt area in late stage of construction

Red indicates changes since [redacted] the cutoff date of the updated report, [redacted] 25X1

*The former SS-7 ICBM complexes in the central and eastern USSR currently have [redacted] under construction at their RTPs; these areas consist of high two-bay, technical support, and clerestory buildings. 25X1

25X1



7. (S/D) Probable SS-16/-20 equipment was identified in the storage and maintenance area of the Bobrovskiy Missile Support Rear Depot (MSRD). Probable SS-16/-20 towed canister dollies were seen in front of storage buildings on [redacted] and again on [redacted] Two slightly different variations of the SS-20 canister dolly have been identified. Both variations have been seen at Bobrovskiy MSRD (Figures 5 and 6), at deployed SS-20 IRBM bases (Figure 7), and at Kapustin Yar MSTC. Evidence suggests that the dollies seen at Bobrovskiy were shipped disassembled and were reassembled in the storage and maintenance area of the depot. Also, a probable SS-16/-20 missile canister was identified in the storage and maintenance area at Bobrovskiy (Figure 8). The canister, first observed in November 1977, remained in the same area for approximately two years and was removed between [redacted] A nearby SS-11 canister was used for visual and mensural comparison. 25X1 25X1 25X1

8. (S/D) Bobrovskiy MSRD is a logical place for the handling and storage of SS-16/-20 missiles since the SS-13, also a solid-propellant missile, was handled here. The facility is also one of the two rear depots closest to Votkinsk Missile Final Assembly and Checkout Facility ([redacted]. Bobrovskiy is approximately 250 nautical miles (nm) from Votkinsk, and Glasov MSRD ([redacted] is 90 nm from Votkinsk. 25X1

9. (TSR) On [redacted] a partially erected probable SS-20 missile canister was seen in an open SRB at Verkhnyaya Salda Mobile IRBM Base 2 (Figure 9). The roof of the SRB was open and the canister was slightly erected. This is the first time that an SS-20 canister or TEL has been seen in an SRB with the roof in the open position. 25X1

10. (TSR) Two SRBs were also observed occupied at Novosibirsk Mobile IRBM Base 2 on [redacted] (Figures 10 and 11). One of the open SRBs was occupied by an empty SS-20 TEL/resupply vehicle. In the second SRB was an SS-20 canister on a probable TEL/resupply vehicle. 25X1

11. (TSR) Thirty-one permanent field training areas (FTAs) to support SS-20 crew training operations have been identified.[2] For ease of reference and of reporting SS-20 field training exercises, each FTA has been assigned a designator (Table 2). The first digit or letter of the designator associates the FTA with the closest SS-20 mobile IRBM support base, rail-to-road transfer point (RTP), or remote site. If the FTA has vehicle revetments, the abbreviation Rvt follows the designator. For example, Drovyanaya SS-20 FTA 1A-Rvt indicates that this particular training area is closest to Drovyanaya Mobile IRBM Base 1 and contains revetments. Likewise, Drovyanaya SS-20 FTA RB-Rvt means that this training area is closest to the Drovyanaya RTP and

Table 2.
SS-20 Field Training Areas, USSR

This table in its entirety is classified SECRET/WNINTEL

Installation Name	BE No	Geographic Coordinates
Western USSR		
Kozhanovichi SS-20 FTA 1A-Rvt	[redacted]	52-18-02N 027-42-27E
Postavy SS-20 FTA 1A		55-05-40N 026-51-38E
Postavy SS-20 FTA 1B-Rvt		54-56-27N 026-37-06E
Postavy SS-20 FTA 1C-Rvt		54-57-30N 026-28-23E
Smorgon SS-20 FTA 1A-Rvt		54-34-32N 026-21-51E
Central USSR		
Verkhnyaya Salda SS-20 FTA 1A-Rvt		58-03-45N 060-54-20E
Verkhnyaya Salda SS-20 FTA 1B-Rvt		58-09-04N 060-44-42E
Yurya SS-20 FTA 2A-Rvt		59-08-41N 049-43-22E
Yurya SS-20 FTA 3A-Rvt		59-15-16N 049-22-30E
Yurya SS-20 FTA 3B-Rvt		59-15-37N 049-23-15E
Yurya SS-20 FTA 3C-Rvt		59-16-01N 049-23-57E
Yurya SS-20 FTA RA		59-08-48N 049-24-21E
West Siberia		
Novosibirsk SS-20 FTA RA-Rvt		55-16-25N 083-03-00E
Novosibirsk SS-20 FTA RB-Rvt		55-16-35N 083-03-20E
Novosibirsk SS-20 FTA RC		55-17-12N 083-01-02E
Novosibirsk SS-20 FTA RD-Rvt		55-16-53N 083-04-54E
East Siberia		
Drovyanaya SS-20 FTA 1A-Rvt		51-28-16N 112-59-59E
Drovyanaya SS-20 FTA 1B-Rvt		51-27-58N 112-59-27E
Drovyanaya SS-20 FTA 1C-Rvt		51-27-55N 112-57-37E
Drovyanaya SS-20 FTA 1D-Rvt		51-28-41N 112-51-19E
Drovyanaya SS-20 FTA 2A-Rvt		51-20-14N 112-55-00E
Drovyanaya SS-20 FTA 3A		51-25-04N 113-04-50E
Drovyanaya SS-20 FTA 3B-Rvt		51-26-18N 112-59-20E
Drovyanaya SS-20 FTA 3C		51-25-51N 112-57-35E
Drovyanaya SS-20 FTA 3D-Rvt		51-27-46N 112-53-17E
Drovyanaya SS-20 FTA 5A-Rvt		51-24-03N 112-56-10E
Drovyanaya SS-20 FTA 5B-Rvt		51-22-47N 112-55-53E
Drovyanaya SS-20 FTA RA-Rvt		51-29-30N 113-02-25E
Drovyanaya SS-20 FTA RB-Rvt		51-31-29N 113-02-53E
Drovyanaya SS-20 FTA SA-Rvt		51-31-51N 112-45-32E
Drovyanaya SS-20 FTA SB-Rvt		51-31-54N 112-44-35E

also contains revetments. For training areas closest to SS-20 remote sites, the letter S is used and followed by a letter. The association of a training area with a particular mobile base does not imply that SS-20 crews using the area come from that base.

12. (TSR) Ten SS-20 field training exercises were observed—six at Drovyanaya, two at Yurya, one at Verkhnyaya Salda, and one at Novosibirsk. The exercises observed at Drovyanaya on [redacted] were the only confirmed regiment-sized exercises. 25X1

13. (TSR) An SS-20 field training exercise was observed 0.3 nm east of Novosibirsk Mobile IRBM Base 2 on [redacted] The battalion-sized exercise consisted of three camouflaged SS-20 TELs/resupply vehicles with canisters and eight support vehicles (Figure 12). This is the closest to any base that an SS-20 field training exercise has been seen to date. All previous exercises in the Novosibirsk division have been conducted near the RTP. 25X1

14. (TSR) At Kapustin Yar MSTC SSM, only two of the four SS-20 support facilities were seen on total coverage during the reporting period (Launch Site 1C and Bivouac/Troop Training Area). The Missile Receiving/Inspection/Storage Area was seen once on partial coverage of [redacted] No coverage was available of the General Support Area or any of the six SS-20 crew training areas. Related SS-20 activity observed during the period includes the resumption of construction of the three-bay garage at Launch Site 1C and the sighting of 12 canvas-covered SS-20-associated vehicles at the Receiving/Inspection/Storage Area and of probable SS-20-related vehicles near the three single-bay garages in the Bivouac/Troop Training Area. 25X1

15. (S/D) Three SS-20 launches took place at the test center during the reporting period.

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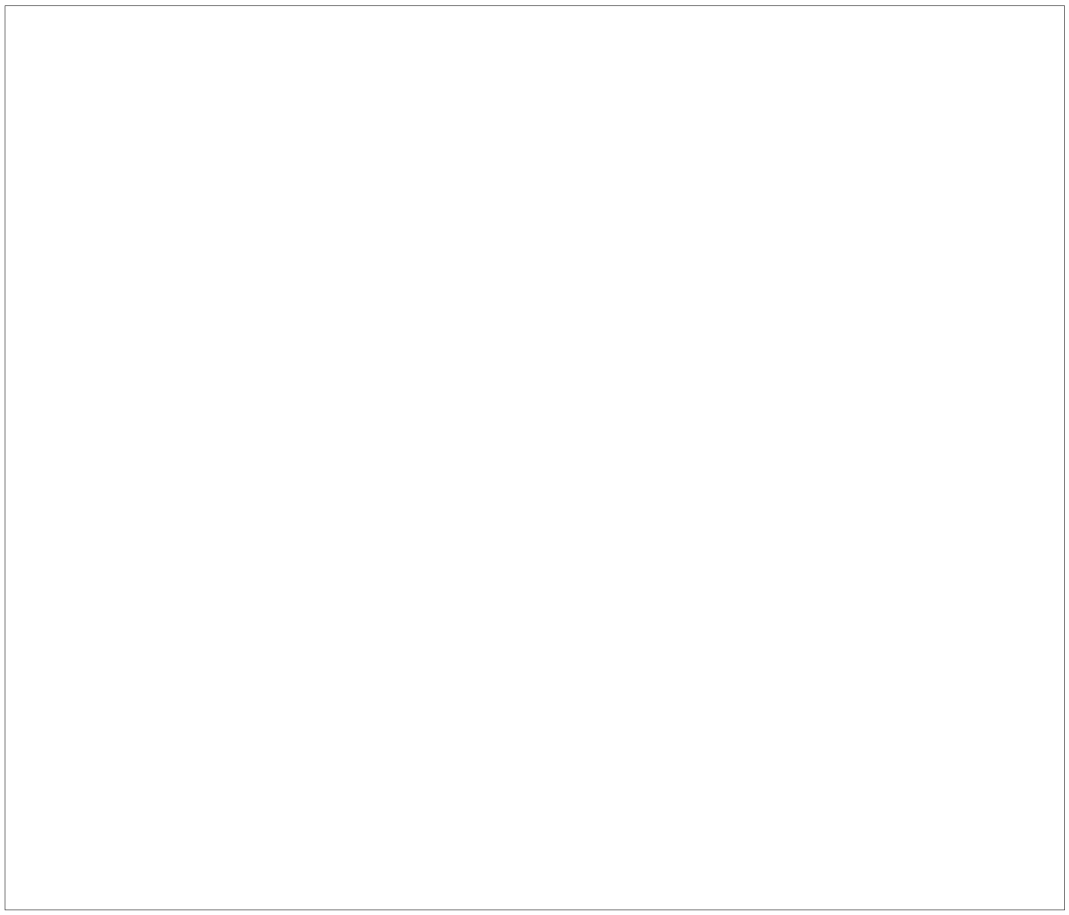

16. (S/D) **Launch Site 1C.** Construction had resumed on the three-bay garage between Launch Pads 1C-2 and 1C-3 (Figure 13) by early May. When last observed on [redacted] the garage was nearly externally complete, and a cable trench extended from the three-bay garage to the single-bay garage at Launch Pad 1C-3. On [redacted] a missile railcar was observed on the rail line immediately west of Launch Pad 1C-3. Between [redacted] an expended SS-20 canister was deposited in the SS-20 canister boneyard at Launch Pad 1C-2. An SS-20 launch took place on [redacted] 25X1 25X1 25X1 25X1

17. (S/D) **Missile Receiving/Inspection/Storage Area.** On [redacted] one empty SS-20 TEL and seven SS-20 support vans, all canvas covered, were seen near the six-bay garage. A probable communications unit nearby included a possible truck-mounted TWIN EAR antenna and three support vehicles, all canvas/net covered. SS-20 vehicles seen in this area are normally awaiting departure from the test center. 25X1

18. (S/D) **Bivouac/Troop Training Area.** On [redacted] six large MAZ-type vehicles (two canvas/net covered) were seen within the battalion-sized training area which is fence secured and contains a single-bay garage. This was the first sighting of SS-20 vehicles in this area since the area was completed in late 1979. 25X1

Plesetsk Missile/Space Test Center SSM

19. (S/D) All four mobile-missile-associated bases (mobile facilities 1 and 2 and sites 5 and 6) and the SS-16 receiving and checkout area of the Missile Handling Facility were seen during the reporting period. The following construction/activity was observed: at Mobile Facility 1, four support buildings in the site support area were in various stages of construction; at Mobile Facility 2 on [redacted] seven engineering-type vehicles were in front of an 11-bay garage; and at Launch Site 5, construction was continuing on the high two-bay payload handling building, and by [redacted] the roof had been put on the building. 25X1 25X1

20. (S/D) Activity was observed at Launch Site 21, a former mobile missile test site which had been inactive since the termination of SS-16 testing at the site in 1976. On [redacted] crates of various sizes were seen near the entrance to the site. These crates remained at the site for the duration of the reporting period. Trucks were also observed in the site area and at the site security area during this period. This activity may be an indication of new testing at the site. 25X1

Table 3. Minimum Number of SS-20 Single-Bay Garages Fabricated at And Shipped from Bryansk Guided Missile Support Equipment Plant II

This table in its entirety is classifed SECRET/WNINTEL

	Number of Days Between Coverages	Fabricated Complete Garages*	Fabricated Incomplete Garages	Shipped Complete Garages*	Shipped Incomplete Garages	
[redacted]	22	0	4–5	1	4–5	25X1
	2	0	3–4	0	2	
	66	0	7–8	0	11–12	
	10	0	2	0	4	
	9	0	2	0	2	
Total		0	18–21	1	23–25	
Garages fabricated and shipped, [redacted]			18–21		24–26	25X1
Garages fabricated and shipped, prior to [redacted]			231–261		221–247	25X1
Garages fabricated and shipped, since April 76			249–282		245–273	

*Includes two stationary end sections and eight sliding-roof sections.

**No usable imagery of the plant was acquired between [redacted] 25X1

Single-Bay Garage Production

Bryansk Guided Missile Support Equipment Plant II

21. (S/D) Sliding-roof sections for at least 18 garages were fabricated, and sections for at least 24 garages were shipped out of the plant (Table 3). These totals, as well as others in Table 3, are probably minimum numbers because of the paucity and quality of imagery available.

SS-16/-20 Command and Control

22. [redacted] Significant command and control activity observed during the reporting period (Table 4) included the installation of two sets of mast-mounted TWIN EAR antennas (possibly TRISOMIC[4]/R-412) at the Drovyanaya ICBM Headquarters Radio Communications (Radcom) Receiver Bunker Hard [redacted] construction of seven lattice towers at the Yurya ICBM Complex Command Post (CP)/Bunker (BE [redacted] and the first SS-20 related modifications at the Olovyannaya ICBM Complex CP/Bunker (BE [redacted] 25X1 25X1 25X1 25X1

23. (S/D) Modification of the Drovyanaya ICBM facility continued during the reporting period. Two sets of mast mounted TWIN EAR troposcatter antennas were erected near the control bunker (Figure 14). This is the first time this antenna has been seen installed at a deployed strategic rocket forces (SRF) facility. Two lattice towers were erected near the control bunker. Several masts which had supported both of the FISHBONE antennas were removed. Based on their orientation, these FISHBONE antennas probably corresponded with Moscow. No antennas were observed on the lattice towers.

24. (S/D) Seven 28-meter-high lattice towers and a new frequency-diverse pair of horizontal dipole antennas were constructed in the antenna field surrounding the Yurya ICBM Complex CP/Bunker (Figure 15). The new horizontal dipole antennas are oriented [redacted] No antennas were observed on the lattice towers. 25X1

25. (S/D) SS-20-related modifications were observed for the first time at the Olovyannaya ICBM Complex CP/Bunker. Three excavations, probably footings for lattice towers, were observed near the bunker. Several other smaller excavations were observed in the area, and a new building was under construction in the support area near the bunker. Another small building was under construction next to the type-B communications satellite building.

26. (S/D) Modification of the Olovyannaya ICBM Headquarters Radcom Receiver Bunker Hard (BE [redacted] continued. The two buildings which were under construction in the antenna field were externally complete. A frequency-diverse pair of horizontal dipole antennas and one FISHBONE antenna were inoperable with several masts down. The horizontal dipole antennas had been oriented toward Chita, and the FISHBONE antenna had been oriented toward Dzhambul. 25X1

27. (S/D) A frequency-diverse pair of horizontal dipole antennas have been erected near the C-shaped command and control building at the Rechitsa Mobile IRBM Support Base. These antennas are oriented [redacted] degrees with Moscow as the probable correspondent. 25X1

 25X1

Table 4.Command and Control Developments at Deployed SS-16/-20 Associated Facilities as of [redacted] *This table in its entirety is classified TOP SECRET RUFF* 25X1

		NEW SS-16/-20-RELATED ANTENNAS								PRESENT ANTENNA INVENTORY															
	Active - Deactivated / Under Construction	30-Meter Lattice Tower	Prob Roof-Mounted Antenna Arrays	Horizontal Dipole Antennas	FISHBONE Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Lattice Towers (all types)	Horizontal Dipole Antennas	FISHBONE Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Large C-Shaped Hq/Admin Bldg	Small C-Shaped C&C Bldg	Rectangular Bldg Assoc w/Small C-Shaped Bldg	Bunker Modification Yes-No/Completed	Comsat Station	TWIN EAR Unit Regularly Seen	Comments
CHITA SRF/ARMY																								
Drovyanaya ICBM Cplx																								
CP/Bnk [redacted]	A	4	—	—	2	—	—	—	—	6	—	3	—	—	—	1	—	—	—	Comp	Type B*	No		Trenching & excavations observed near commo satellite bldg
CP/Alt/Bnk [redacted]	A	2	—	—	—	—	—	—	—	2	—	4	—	—	—	3	—	—	—	No	—	Yes		Parking apron for TWIN EAR ant still ucon
Rad Rcvr [redacted]	U	2	—	—	—	—	—	—	2*	3	3	—	—	—	—	—	—	—	—	Yes	—	No		2 sets of mast-mounted TWIN EAR ants erected
Rad Xmtr [redacted]	A	—	—	—	—	—	—	—	—	—	4	—	8	—	—	—	—	—	—	*	—	No		Facility now completed
Mobile Base 1 [redacted]	A	2	Yes	—	—	—	—	—	2	2	—	—	—	—	—	2	—	—	—	—	—	*		Occasionally seen
Mobile Base 2	A	2	Yes	—	—	—	—	—	1	2	—	—	—	—	—	1	—	—	—	—	—	No		
Mobile Base 3	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No		
Mobile Base 4	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No		
Mobile Base 5 [redacted]	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No		
Olovyannaya ICBM Cplx																								
CP/Bnk [redacted]	A	—	—	—	—	—	—	—	—	—	1	3	—	—	—	2	—	—	—	No	Type B	No		3 excavations prob for new lattice towers
CP/Alt/Bnk [redacted]	A	—	—	—	—	—	—	—	—	—	2	4	—	—	—	5	—	—	—	No	—	No		
Rad Rcvr [redacted]	A	—	—	—	—	—	—	—	—	2	1	3*	—	—	2	1	—	—	—	No*	—	No		1 FISHBONE ant removed; 2 new bldgs ucon in ant field
Rad Xmtr NE [redacted]	A	—	—	—	—	—	—	—	—	—	4	—	8	—	—	—	—	—	—	No	—	No		
Rad Xmtr NW [redacted]	A	—	—	—	—	—	—	—	—	2	6	—	6	—	2	—	—	—	—	No	—	No		
Mobile Base 1 [redacted]	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No		
VINNITSA SRF ARMY																								
Mozyr MRBM Div																								
CP/Bnk [redacted]	A	—	—	—	—	—	—	2*	—	—	2	—	—	—	2	3	—	—	—	Comp	Type A	No		2 hardened WASHER ants
Rad Rcvr [redacted]	A	—	—	—	—	—	—	—	—	—	4	—	—	2	2	3*	—	—	—	No	—	No		2 masts support FORK REST ants
Rad Xmtr [redacted]	A	—	—	1	—	—	—	—	—	—	6	—	—	2	—	2*	—	—	—	No	—	No		2 masts support FORK REST ants (Dec 1977 imagery)
Mobile Base 1 [redacted]	A	—	No	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	Ucon	—	—	No		Located 3.5 nm SW of div CP & rcvr
Konkovichi MRBM Regt																								
CP/Bnk [redacted]	A	—	—	1	—	—	—	—	3	—	4	—	—	—	—	1	—	—	—	*	No	No		Bldg constructed at end of bunker & ants erected
Rad Rcvr [redacted]	A	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	No	No	No		
Rad Xmtr [redacted]	A	—	—	—	—	—	—	—	—	—	8	—	—	1 prob	—	—	—	—	—	No	No	No		
Mobile Base [redacted]	A	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	Ucon	—	—	—	—	No		Mobile base collocated with rcvr & CP
Kozhanovichi MRBM Regt																								
CP/Bnk* [redacted]	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	—		This facility is not the regt CP/bnk & prob never functioned as such
Rad Rcvr [redacted]	A	—	—	2	—	—	—	—	1	—	4	—	—	2	—	3	Ucon	1*	No	No	No	—		Ants by C-shaped C&C bldg listed under rcvr totals
Rad Xmtr [redacted]	A	—	—	—	—	—	—	—	—	—	4	—	—	2	—	—	—	—	—	No	No	—		
Mobile Base [redacted]	A	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		Mobile base collocated with rcvr & CP
Gomel MRBM Regt																								
CP/Bnk [redacted]	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	No	No	No		
Rad Rcvr [redacted]	A	—	—	—	—	—	—	—	—	—	2	—	—	2	1	5*	—	—	—	No	No	No		2 masts support FORK REST ant
Rad Xmtr [redacted]	A	—	—	—	—	—	—	—	—	—	8	—	—	4	—	3*	—	—	—	No	No	No		3 FORK REST ants
Mobile Base* [redacted]	U	—	No	—	—	—	—	—	—	—	2*	—	—	—	—	—	Ucon	Comp	Comp	—	—	No		Rechitsa Mobile IRBM Spt Base; ants located by C-shaped C&C bldg
OMSK SRF ARMY																								
Novosibirsk ICBM Cplx																								
CP/Bnk [redacted]	A	2	—	—	1	—	—	—	1	4	2	1	—	1	—	—	*	—	—	Yes	—	—		Foundation in spt area
Rad Rcvr [redacted]	A	1	—	—	2	—	—	—	2	1	2	3	—	—	1	2*	—	—	—	—	—	—		1 mast supports FORK REST ant
Rad Xmtr [redacted]	A	2	—	7	—	6	—	—	1	2	7	—	6	—	—	1	—	—	—	No	—	No		

*See comments.

 25X1

Table 4. (Continued)

		NEW SS-16/-20-RELATED ANTENNAS									PRESENT ANTENNA INVENTORY												
	Active - Deactivated Under Construction	30-Meter Lattice Tower	Prob Roof-Mounted Antenna Arrays	Horizontal Dipole Antennas	FISHBONE Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Lattice Towers (all types)	Horizontal Dipole Antennas	FISHBONE Antennas	Rhombic Antennas	Quadrant Antennas	Hardened Antennas	Antenna Masts	Large C-Shaped Hq/Admin Bldg	Small C-Shaped Bldg	Rectangular Bldg Assoc w/Small C-Shaped Bldg	Bunker Modification Yes-No-Completed	Comsat Station	TWIN EAR Unit Regularly Seen	Comments
Mobile Base 1	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 2	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 3	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 4	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	
SMOLENSK SRF ARMY																							
Postavy MR/IRBM Div																							
CP/Bnk	A	1	—	3	—	—	1	—	—	1	5	—	—	1	—	3	—	—	—	Comp	No	Yes	
Rad Rcvr	*	2	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	Yes	No	No	Presently undergoing modification
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	9	—	—	2	—	6	—	—	—	No	No	No	
Postavy MRBM Regt																							
CP/Bnk	A	—	—	2	—	—	—	—	—	—	2	—	—	—	—	1	Comp	—	—	Comp	No	No	
Rad Rcvr	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	Facility deactivated
Mobile Base	A	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Yes	Mobile base collocated with regt CP & recvr
Smorgon MRBM Regt																							
CP/Bnk	A	—	—	2	—	—	—	—	1	—	2	—	—	—	—	1	—	—	—	Comp	No	No	
Rad Rcvr	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	
Mobile Base 1	A	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 2	U	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Ucon	—	—	—	No	
Polotsk MRBM Regt																							
CP/Bnk	A	—	—	2	—	—	—	—	3	—	2	—	—	—	—	3	—	—	—	Yes	No	No	
Rad Rcvr	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	No	
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	8	—	—	2	—	1*	—	—	—	No	No	No	Polotsk/Disna MRBM Regt Xmtr; mast supports a FORK REST ant
Mobile Base 1	A	—	No	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 2	U	—	No	—	—	—	—	—	—	—	2	—	—	—	—	—	—	Ucon	—	—	—	No	
ORENBURG SRF ARMY																							
Verkhnyaya Salada ICBM Cplx																							
CP/Bnk	A	7	—	5	1	—	—	—	—	9	5	1	—	—	—	1	—	—	—	Ucon	No	No	Currently undergoing modification
Rad Rcvr	A	—	—	—	—	—	—	—	—	—	2	2	—	2	2	5	—	—	—	—	No	No	
Hq Spt Rcvr	A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	No	Facility prob deactivated
Rad Xmtr	A	—	—	—	—	—	1	—	—	—	7	—	3	1	—	4	—	—	—	Ucon	No	No	2 FORK REST ants
Mobile Base 1	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 2	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 3	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 4	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	
VLADIMIR SRF ARMY																							
Yurya ICBM Cplx																							
CP/Bnk	A	7	—	4	1	—	—	—	—	9	4	1	—	—	—	2	—	—	—	Ucon	No	No	Bunker mod underway; 2 new bks ucon near CP/bnk
Rad Rcvr	A	—	—	—	—	—	—	—	—	—	8	—	—	2	—	2*	—	—	—	—	No	No	2 FORK REST ants
Rad Xmtr	A	—	—	—	—	—	—	—	—	—	10	—	1	—	—	6*	—	—	—	—	No	No	3 FORK REST ants; 1 R-400 ant
Mobile Base 1	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 2	A	2	Yes	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 3	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	
Mobile Base 4	U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	No	

*See comments.

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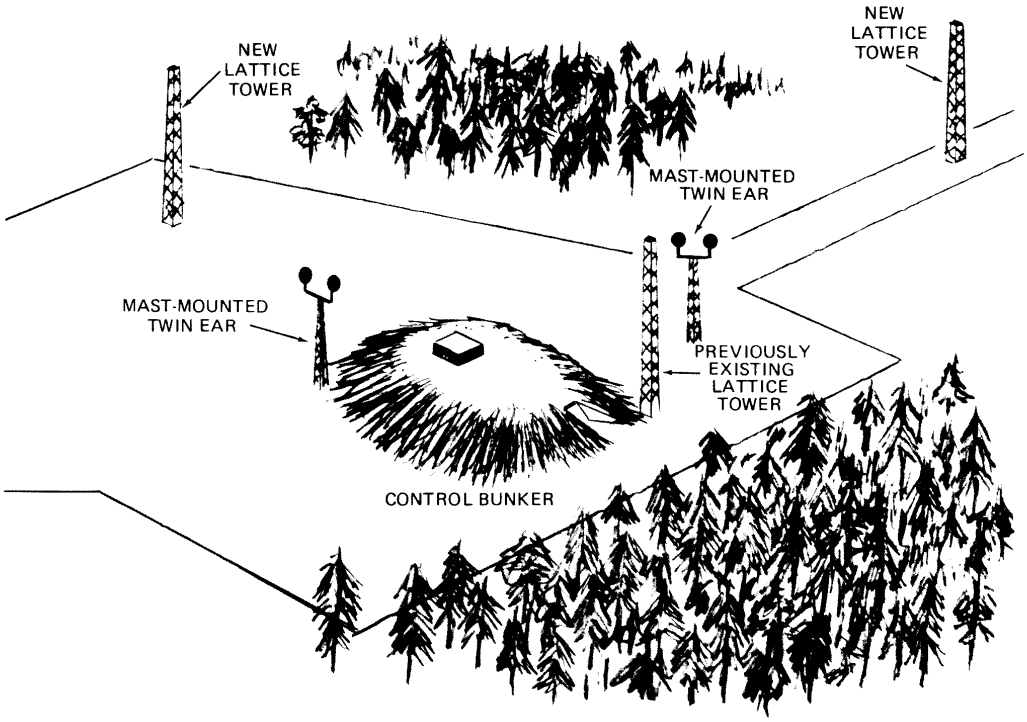

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IMAGERY

(TSR) All applicable KEYHOLE imagery from [redacted] was used in the preparation of this report. Selected earlier imagery was also used. 25X1

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	Command and Control Activity	

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